

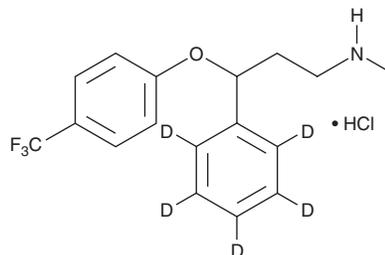
PRODUCT INFORMATION



Fluoxetine-d₅ (hydrochloride)

Item No. 18253

CAS Registry No.: 1173020-43-3
Formal Name: N-methyl-3-(phenyl-d₅)-3-(4-(trifluoromethyl)phenoxy)propan-1-amine, monohydrochloride
MF: C₁₇H₁₃D₅F₃NO • HCl
FW: 350.8
Chemical Purity: ≥98% (Fluoxetine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
UV/Vis.: λ_{max}: 227, 263 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Fluoxetine-d₅ (hydrochloride) is intended for use as an internal standard for the quantification of fluoxetine (Item No. 14418) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Fluoxetine-d₅ (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the fluoxetine-d₅ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Fluoxetine-d₅ (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of fluoxetine-d₅ (hydrochloride) in ethanol and DMSO is approximately 12.5 mg/ml and approximately 16 mg/ml in DMF.

Description

Fluoxetine is a selective serotonin reuptake inhibitor, displaying a marked preference for the serotonin transporter (K_d = 0.81 nM) over the norepinephrine transporter (K_d = 240 nM) and the dopamine transporter (K_d = 3,600 nM).¹ Formulations containing fluoxetine have been effective in the treatment of major depression as well as other psychiatric disorders.^{2,3}

References

1. Tatsumi, M., Groshan, K., Blakely, R.D., *et al.* Pharmacological profile of antidepressants and related compounds at human monoamine transporters. *Eur. J. Pharmacol.* **340(2-3)**, 249-258 (1997).
2. Farley, R.L. Pharmacological treatment of major depressive disorder in adolescents. *ScientificWorldJournal* **5**, 420-426 (2005).
3. Pacher, P. and Kecskemeti, V. Trends in the development of new antidepressants. Is there a light at the end of the tunnel? *Curr. Med. Chem.* **11(7)**, 925-943 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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